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EXAMINER	
MEHMOOD, JENNIFER	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/530,901	PEETERS, JOHN P.	
	Examiner	Art Unit	
	JENNIFER MEHMOOD	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *RCEx filed on February 15, 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,5,6,9,11,13,19,20,28,29 and 65-93* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 2, 5, 6, 9, 11, 13, 19, 20, 28, 29, 65-93* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 15, 2010 has been entered.

Claim Objections

2. Claim 29 is objected to because of the following informalities: the dependency of claim 29 is based on a cancelled claim (claim 25). However, the examiner will assume that the dependency is from claim 1 instead of claim 25. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 66, 83, 90 and 93 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. For claim 90, it is unclear what processed information relating to sensor data (lines 19 and 20). The Applicant is required to specify and/or define the information processed relating to sensor data.

6. Claim 66 recites the limitations "said personal wireless device" in lines 1 and 2.

7. Claim 83 recites the limitations "said second sensor" in line 16, "the internal microprocessor" in line 17 and "a second stage" in line 18 (there is no "first stage" previous to "second stage").

8. Claim 90 recites the limitations "the one or more sensor elements" in lines 4 and 5; "the RF addressable skin patch" in lines 13 and 16; "said unique wireless device ID" in line 19; "said wireless device processed information" in line 19; "ID" in line 22 (Is this the "unique ID", the "tag ID", the "device ID"?); and "said chemical sensors" in line 25.

9. Claim 93 recites the limitation "the bearer of said patch" in line 2.

There is insufficient antecedent basis for these limitations in the claims.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1, 2, 9, 11, 13, 19, 20 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crowley (US 7,142,114) and further in view of Nelson, Jr. (US 6,297,727), Quinn et al. (US 2005/0101843 A1) and Evanyk et al. (US 2004/0225199 A1).

For claim 1, Crowley discloses a diagnostics system comprising: a patch having an adhesive portion adapted to stick to the skin of a human subject (col 10, lns 10-20; Fig. 2, item 68); a radio frequency identification tag (RFID) (col 4, lns 14-20; col 7, lns 51-60); and a sensor module integrated with said patch, said patch further having an antenna (Fig. 1, item 42), an RFID chip (col 5, lns 15-17; col 7, lns 61-65), and at least one sensor associated with a unique identification code (col 4, lns 14-20), said RFID and sensor module responding to a biological stimulus by wirelessly transmitting through the use of said antenna signals that correspond to said biological stimulus (col 9, lns 44-56); an autonomous wireless reader with a unique identification code for communication with said RFID tag and sensor module (Fig. 1, item 10; col 4, lns 59-67; col 8, lns 25-49). The interrogator (10) disclosed by Crowley is considered autonomous because it is transmitting and responding independently with the transponder (40) without outside control. While Crowley discloses an adhesive RFID tag attached to the skin of a patient, Crowley does not specifically disclose that the patch is flexible. Nelson, on the other hand, discloses an adhesive, flexible RFID patch (col 4, lns 66-67; col 5, lns 1-5). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to construct the RFID patch, disclosed by Crowley, with a flexible material, as disclosed by Nelson, so that the RFID patch will move freely on a non-planar surface such as a patient's skin (Crowley - col 9, lns 5-10), while providing the patient optimal comfort of having a non-rigid, contoured structure attached to their skin. In addition, Crowley does not disclose that the biological stimulus is radiation. However, Quinn discloses a patch attached to a user that measures radiation (parags

0016 and 0047). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a patch located on a user, as disclosed by Crowley, that measures radiation, as disclosed by Quinn, in order to detect correct dosages of radiation, in order to ensure the correct treatment of a patient. While Crowley discloses an RFID reader, Crowley does not disclose that the reader is adapted to communicate information over a wireless network. Evanyk, on the other hand, discloses an RFID reader adapted to communicate information over a wireless network (parag 0061). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to include the RFID reader, disclosed by Crowley, adapted to communicate information over a wireless network, as disclosed by Evanyk, in order to communicate via multiple communication paths so that information from the tag is received at multiple locations, thereby enhancing the versatility of the system.

For claim 2, Crowley discloses a substantial portion of said RFID tag and sensor module is integrated onto a substrate disk (col 5, lns 15-22; col 6, lns 52-60).

For claim 9, Crowley discloses said RFID reader is selected from the group consisting of a cellular telephone, a personal digital assistant, a beeper, and a computer (Figs. 3 and 5, item 10; col 7, lns 30-34; col 8, lns 34-42).

For claim 11, Crowley discloses said RFID tag and sensor module further comprises a power unit adapted to stabilize voltage within said RFID tag and sensor module (col 8, lns 54-65; Fig. 1, items 46 and 50).

For claim 13, Crowley discloses an RFID tag and sensor formed as an integrated circuit (IC – col 5, lns 15-20; col 6, lns 46-51).

For claim 19, Crowley discloses said patch is disposable (col 4, lns 47-51).

For claim 20, Crowley discloses said RFID tag further includes a power generation module that powers said RFID tag (col 8, lns 13-15).

For claim 28, Crowley discloses a wireless network, but does not disclose communicating through the use of a communication protocol including, Bluetooth, Wi-Fi, Broadband, WLAN, and 3G. However, Evanyk discloses communicating through the use of a communication protocol including, Bluetooth, Wi-Fi, Broadband, WLAN, and 3G (parags 0025 and 0061). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to include communicating information over a wireless network using a communication protocol, as disclosed by Evanyk, in order to communicate via multiple communication paths so that information from the tag is received at multiple locations, thereby enhancing the versatility of the system.

12. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crowley (US 7,142,114), Nelson, Jr. (US 6,297,727), Quinn et al. (US 2005/0101843 A1) and Evanyk et al. (US 2004/0225199 A1), and further in view of Ikefuji (US 5,774,062).

For claim 5, Crowley discloses a controller communicative with said sensor interface, said controller having a memory with a sensor data table being adapted to analyze said at least one sensor within said RFID tag and sensor module (col 5, lns 33-36 and 55-67; col 6, lns 1-12). Crowley, however, does not include a sensor interface having an analog to digital converter coupled to at least one sensor. Ikefuji, on the other hand, discloses a sensor interface having an analog to digital converter coupled to

at least one sensor (Fig. 1, item 18; Fig. 6, A/D; col 8, lns 10-15). It would have been obvious to include an analog digital converter coupled to the sensor, as disclosed by Ikefuji, and interfaced with the controller of Crowley, so that an abundant amount of information from the sensor is sent back to the interrogator/reader via digital signals so that a diagnosis is made in a timely manner.

For claim 6, Crowley discloses said controller stores a sensor ID number in said sensor data table (col 4, lns 10-20).

13. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crowley (US 7,142,114), Nelson, Jr. (US 6,297,727), Quinn et al. (US 2005/0101843 A1) and Evanyk et al. (US 2004/0225199 A1), and further in view of Zeps et al. (US 6,937,154).

For claim 29, Crowley discloses an RFID reader as a mobile, portable device, but does not disclose the RFID reader as a cellular telephone. Zeps, however, discloses the RFID reader as a cellular telephone (Fig. 1, items 31 and 34; col 3, lns 33-45). It would have been obvious to design the reader as a cellular telephone so that the reader is used for multiple purposes such as interrogating transponders and communicating with another during an emergency.

14. Claims 65, 69, 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evanyk et al. (US 2004/0225199 A1) in view of Jeutter et al. (US 6,583,722 B2).

For claim 65, Evanyk discloses a radio frequency (RF) addressable diagnostic sensor unit comprising: at least one sensor element (parag 0050, lns 1-11); a unique identification ID number (parag 0020; parag 0050, lns 32-35); a sensor interface having an analog to digital converter coupled to the at least one sensor (Fig. 5A, items 76, 78;

parag 0050, lns 6-15); at least one antenna (parag 0067, lns 6-10; Fig. 5B, item 98); an RF power and communication interface coupled to the at least one antenna and sensor interface (parag 0067, lns 3-17; Fig. 5B, item 92); a controller (Fig. 5B, item 87; parag 0066, lns 18-35) coupled to the RF power and communications interface and the sensor interface; and a memory (Fig. 5B, item 88; parag 0067, lns 6-8) coupled to the controller and the sensor interface; wherein the RF addressable sensor communicates with a remote wireless device (parag 0072, lns 10-13), said wireless device having multiple wireless communication means (parag 0061), geolocation means (parags 0014 an d0015) and a unique ID (parag 0072, lns 10-13), whereby said wireless device is coupled to at least one communications network (Fig. 8, item 22) linked to at least one remote server (Fig. 8, item 75; parag 0056); and wherein the wireless device communicates with the RF addressable sensor interface to obtain the ID and sensor data (parag 0050, lns 33-40; Figs. 1-3, items 12 and 14); wherein the remote server authenticates said unique sensor ID associated with said unique wireless device ID and communicates to said wireless device processed information relating to said sensor data (parag 0021, lns 10-20) or to first download software related to the unique sensor ID, thereby allowing said wireless device to interpret said sensor anywhere worldwide (parags 0080-0082). Evanyk does not disclose a substrate and a reference sensor, however, Jeutter, discloses a reference tag sensor located on a substrate (col 4, lns 65-67; col 5, lns 1-5; col 10, lns 8-20). The sensor 26, connected to transponder 28 (Figs. 3A and 4) is considered a reference sensor since it detects a first, dry condition and then detects a second condition (wet condition). It would have been obvious to one of

ordinary skill in the art, at the time the invention was made to include a reference sensor located on a substrate, as disclosed by Jeutter, and use it in lieu of the transponder, disclosed by Evanyk, so that initial (reference) values are sensed in order to determine and notify that a change has occurred for determining an alarm condition.

For claim 69, Evanyk discloses a sensor, but Evanyk does not disclose a chemical sensor. Jeutter, on the other hand, discloses a chemical sensor (col 9, lns 59-65). It would have been obvious to substitute the sensor disclosed by Evanyk for the chemical sensor disclosed by Jeutter, so that the sensor responds to chemical changes, thereby notifying appropriate parties of a chemical change in order to ensure the safety of a patient or monitored person whose body has experienced a chemical change.

For claim 74, Evanyk discloses a non-GPS geolocation means for geolocating said system (parag 0014).

15. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evanyk et al. (US 2004/0225199 A1) and Jeutter et al. (US 6,583,722 B2), and further in view of Zeps et al. (US 6,937,154).

Evanyk discloses a (personal) wireless device (parag 0013), but does not disclose that the wireless device is a cellular telephone. Zeps, however, discloses a wireless device as a cellular telephone (Fig. 1, items 31 and 34; col 3, lns 33-45). It would have been obvious to design the personal wireless device, disclosed by Evanyk, as a cellular telephone, as disclosed by Zeps, so that the wireless device is used for multiple purposes such as interrogating transponders and communicating with another during an emergency.

16. Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evanyk et al. (US 2004/0225199 A1) and Jeutter et al. (US 6,583,722 B2), and further in view of Crowley (US 7,142,114).

Evanyk discloses a sensor unit integrated onto a wireless skin patch for diagnostic applications (parag 0018), but Evanyk does not disclose that the patch is disposable. However, Crowley, discloses a disposable, wireless skin patch (col 4, lns 39-51). It would have been obvious to design the wireless skin patch, disclosed by Evanyk, as a disposable skin patch, as disclosed by Crowley, so that the patch is thrown away after use for sanitary reasons.

17. Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evanyk et al. (US 2004/0225199 A1) and Jeutter et al. (US 6,583,722 B2), and further in view of Lye et al. (US 2004/0100376).

Evanyk disclose a wireless sensor tag, but does not disclose a that the sensor is integrated into a immunoassay. Lye, however, discloses a wireless sensor module integrated into a disposable immunoassay (Fig. 3, item 12; parags, 0101, 0164 and 0165). It would have been obvious to include the wireless tag sensor, disclosed by Evanyk, integrated into a disposable immunoassay, as disclosed by Lye, so that particular antigens are detected and communicated to a remote location for pharmaceutical purposes and then the immunoassay is disposed for sanitary purposes.

18. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evanyk et al. (US 2004/0225199 A1) and Jeutter et al. (US 6,583,722 B2), and further in view of Quinn et al. (US 2005/0101843 A1).

Evanyk discloses a sensor, but does not disclose a radiation sensor. Quinn, however, discloses a patch attached to a user that measures radiation (parags 0016 and 0047). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a patch located on a user, as disclosed by Evanyk, that measures radiation, as disclosed by Quinn, in order to detect correct dosages of radiation, in order to ensure the correct treatment of a patient.

19. Claims 71 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evanyk et al. (US 2004/0225199 A1) and Jeutter et al. (US 6,583,722 B2), and further in view of Anderson (US 7,026,941 B1).

Evanyk discloses a sensor, but does not disclose a MEMS sensor or a combination of chemical, MEMS and other sensors. Anderson, on the other hand, discloses a combination of chemical, MEMS and other sensors (col 3, lns 14-20). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to replace the sensor, disclosed by Evanyk, with the MEMS device, as disclosed by Anderson, in order to sense variables, such as temperature over a distance and operate on very little power thereby enhancing the efficiency of the transponder.

20. Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evanyk et al. (US 2004/0225199 A1) and Jeutter et al. (US 6,583,722 B2), and further in view of Ghazarian (US 7,034,683).

Evanyk discloses a geolocating means, but does not disclose a GPS means for geolocating. Ghazarian, however, discloses a reader that includes a processor adapted to analyze and geolocate a patch through the use of GPS (Fig. 1A, items 32, 40, and

GPS; col 10, lns 37-50; col 17, lns 49-55). It would have been obvious to incorporate a GPS receiver, as disclosed by Ghazarian, into the tag reader disclosed by Evanyk so that a tag or patch's location is accounted for at all times, such as during inventory control, tracking of individuals, etc..

21. Claims 75, 77 and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crowley (US 7,142,114), and further in view of Lu et al. (US 6,172,609), Zeps et al. (US 6,937,154) and Levanon et al. (US 7,652,188 B2).

For claim 75, Crowley discloses a stand-alone wireless diagnostic system comprising: a non-invasive disposable flexible patch having an adhesive portion and adapted to be positioned on a skin surface of a human subject (col 4, lns 39-51; col 10, lns 10-19 - While Crowley does not specifically disclose the word "flexible", the patch disclosed by Crowley is inherently flexible since it is removably detached to a user's dermal surface which is contoured), said patch having a built-in temperature sensor (Fig. 1, item 54; col 9, lns 20-23); a radio frequency identification (RFID) chip with a unique ID and sensor module integrated with said patch and having at least one antenna (col 9, lns 20-31), wherein said RFID chip and sensor module wirelessly transmit (col 4, lns 14-18), through the use of said antenna, signals that correspond to said medical condition in said subject to a wireless cell phone reader adapted to communicate with said RFID chip and sensor module. While Crowley discloses a reader for communication with said RFID tag and sensor module adapted to communicate information over a wireless network, Crowley does not disclose that the reader communicates through the use of multiple protocols with the RFID tag. Lu,

however, discloses a multi-protocol wireless RFID reader for communication with a RFID tag (col 1, lns 49-55; col 2, lns 37-47). It would have been obvious to modify the reader of Crowley whereby it communicates through the use of multiple protocols (col 1, lns 59-67), as disclosed by Lu, so that a single reader is used to communicate with multiple RFID tags, thereby providing an efficient system. In addition, while Crowley discloses an RFID reader as a mobile, portable device, Crowley does not disclose the RFID reader as a cellular telephone. Zeps, however, discloses the RFID reader as a cellular telephone (Fig. 1, items 31 and 34; col 3, lns 33-45). It would have been obvious to design the reader as a cellular telephone so that the reader is used for multiple purposes such as interrogating transponders and communicating with another during an emergency. Furthermore, Crowley does not disclose sensing at least one additional medical condition from a human subject. Levanon, on the other hand, discloses sensing at least one additional medical condition from a human subject (col 2, lns 10-22). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to sense additional medical conditions from a human subject, as disclosed by Levanon, and apply it to the sensing of the temperature condition, disclosed by Crowley, in order to detect and acknowledge a particular condition, thereby acquiring the appropriate treatment for the condition.

For claim 77, Crowley does not disclose a medical condition; however, Levanon discloses a medical condition to include a skin infection. It would have been obvious to one of ordinary skill in the art, at the time the invention was made to sense a skin condition, as disclosed by Levanon, and sense a skin infection via the sensor, disclosed

by Crowley, in order to detect and acknowledge a skin infection, thereby acquiring the appropriate treatment for the infection.

For claim 79, Crowley does not disclose a medical condition; however, a user of the reader may interpret a temperature reading as a fever (by a user interpreting the temperature reading of the display in Fig. 5; col 11, lns 10-22); however, Crowley does not disclose a combination of a skin infection. However, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 77 as stated above, regarding Levanon detecting a skin infection.

22. Claims 76 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crowley (US 7,142,114), Lu et al. (US 6,172,609) Zeps et al. (US 6,937,154), and Levanon et al. (US 7,652,188 B2), and further in view of Evanyk et al. (US 2004/0225199 A1).

Crowley does not disclose a medical condition; however, Evanyk discloses a medical condition to include diabetes (insulin levels) and a heart condition (heart rate). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to sense insulin levels and heart rate, which may be indications of diabetes and a heart condition, respectively, as disclosed by Evanyk, and sense insulin levels and heart rate via the sensor, disclosed by Crowley, in order to detect and acknowledge insulin levels and heart rate which may indications of diabetes and a heart condition, respectively, in order to ensure the proper treatment of a potentially diabetic person or a person with a heart condition.

23. Claim 80 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crowley (US 7,142,114), Lu et al. (US 6,172,609) Zeps et al. (US 6,937,154) and Levanon et al. (US 7,652,188 B2) and further in view of Janky et al. (US 6,166,626).

Crowley does not disclose a wireless cell phone reader that has a unique ID. Janky, however, discloses a wireless cell phone reader that has a unique ID (col 2, lns 61-67; col 3, lns 1-12). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a wireless cell phone reader that has a unique ID, as disclosed by Janky, into the reader disclosed by Crowley, in order to secure communications between a transmitter/tag and a receiver such as a cellular phone.

24. Claims 81 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crowley (US 7,142,114), Lu et al. (US 6,172,609) Zeps et al. (US 6,937,154) and Levanon et al. (US 7,652,188 B2, and further in view of Stilp (US 7,023,341 B2).

Crowley discloses RF signals, but does not disclose that the RF signals include Bluetooth or Zigbee. Stilp, however, discloses RF signals to include Bluetooth and Zigbee (col 20, lns 45-54). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to RF Bluetooth signals, as disclosed by Stilp, as communication between the transponder and reader, disclosed by Crowley, in order to provide a short range of communication between two devices using well-known standards, thereby enhancing the versatility of the devices.

25. Claims 83, 84, 88 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evanyk et al. (US 2004/0225199 A1) and further in view of Crowley (US 7,142,114).

For claim 83, Evanyk discloses a networkable personal wireless medical management system comprising: a personal wireless reader device with a sensor module and an internal microprocessor (Figs. 5A-5C, item 76; parag 0066), a wireless RF communication means compatible with a public wireless network (parag 0061; Fig. 3, item 500, at least one additional reader for communicating with an external wireless device and a geolocation means (Fig. 3, items 14 and 40; parag 0050, lns 32-40); a remote data storage system and server accessible via the public wireless network compatible via at least one protocol means included in said personal wireless device (parag 0061, Fig. 3, item 41; parag 0082); a minimally invasive wireless diagnostic skin patch with a unique ID, a temperature sensor (parag 0066), a communications interface and at least one additional sensor to be applied on the surface of the skin to measure a condition in an individual (parag 0018), said at least one additional sensor (parag 0072) compatible with at least one of the readers of said personal wireless device; wherein the personal wireless device first checks the unique ID of said wireless skin patch (parag 0072), and if said ID is not recognized then the wireless device retrieves relevant information and software from said remote server via said public wireless network, wherein medical data of said second sensor are then transferred wirelessly from said diagnostic skin patch to the personal wireless device, and the internal microprocessor of said personal wireless device analyzes said medical condition, then in a second stage

said microprocessor sends said data via an RF transmission via said wireless network (parags 0081-0083). Evanyk discloses a sensor unit integrated onto a wireless skin patch for diagnostic applications (parag 0018), but Evanyk does not disclose that the patch is disposable. However, Crowley, discloses a disposable, wireless skin patch (col 4, lns 39-51). It would have been obvious to design the wireless skin patch, disclosed by Evanyk, as a disposable skin patch, as disclosed by Crowley, so that the patch is thrown away after use for sanitary reasons.

For claim 84, While Evanyk discloses a transmitter/receiver radio, Evanyk does not specifically disclose that the radio is an RFID radio. However, Crowley, on the other hand, discloses an RFID radio. It would have been obvious to one of ordinary skill in the art, at the time the invention was made to replace the radio disclosed by Evanyk with an RFID radio, disclosed by Crowley, in order to incorporate RFID standards thereby enhancing the versatility of the system.

For claim 88, Evanyk discloses the wireless reader device is a PDA (parag 0027).

For claim 89, Evanyk discloses the wireless reader device is a laptop (parag 0021, lns 1-10).

26. Claims 85 and 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evanyk et al. (US 2004/0225199 A1) and Crowley (US 7,142,114), and further in view of Stilp (US 7,023,341 B2).

For claim 85, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 81 as stated above.

For claim 86, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 81 as stated above. In addition, while Evanyk discloses a personal wireless device for said medical management system, Evanyk does not disclose a combination of RFID and Bluetooth. However, Stilp discloses a combination of RFID and Bluetooth.

27. Claim 87 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evanyk et al. (US 2004/0225199 A1) and Crowley (US 7,142,114), and further in view of Janky et al. (US 6,166,626).

The claim is interpreted and rejected for the same reasons as stated in the rejection of claim 80 as stated above.

28. Claims 90, 92 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evanyk et al. (US 2004/0225199 A1) and further in view of Quinn et al. (US 2005/0101843 A1) and Jeutter et al. (US 6,583,722 B2).

For claim 90, Evanyk discloses an addressable quantitative radio frequency addressable skin patch comprising: a skin patch having at least one sensor with a unique ID (parags 0019 and 0020); a sensor interface having an analog to digital converter coupled to the one or more sensor elements (parag 0018, lns 13-15); at least one antenna (Fig. 5B, items 91 and 98; parag 0067, lns 3-10); an RF power and communication interface coupled to the at least one antenna and the sensor interface (parag 0067, lns 4-17); a controller (Fig. 5B, item 87; parag 0066, lns 18-35) coupled to the RF power and communications interface and the sensor interface; and a memory (Fig. 5B, item 88; parag 0067, lns 6-8) coupled to the controller and the sensor

interface, wherein the memory is configured to store a unique tag identification ID number (parag 0050, lns 32-40); wherein the RF addressable skin patch communicates with a wireless device with a unique ID that is coupled to a communications network linked to at least one remote server (Figs. 1-3, items 14; Fig. 8, item 75; parag 0056); and wherein the wireless device communicates with the RF addressable skin patch to obtain sensor data for transmission over the communications network (Fig. 8); wherein the remote server authenticates remotely said unique sensor tag ID and said unique wireless device ID and communicates to said wireless device (parag 0021, lns 10-20) processed information relating to said sensor data; wherein said patch sensors and ID are directly readable with a personal wireless device coupled to a communications network linked to at least one remote server and comprising multiple radios (Fig. 8, items 22, 75; parag 0056), geolocation means and an interface (parag 0014), and a means to store and relay to said remote server results of said chemical sensors on said patch. Evanyk, however, does not disclose that the sensor is passive and has at least at least one external printable chemical sensor and one external reference sensor. Quinn, however, discloses a passive sensor which has an external reference sensor (parag 0048, lns 11-15; parag 0052, lns 12-19). The interrogator 30 is considered an external reference sensor since it stores threshold values (reference values) and determines if the signals received or sensed by the transponder exceed the threshold values. It would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a passive sensor and an external reference sensor, as disclosed by Quinn, and use the passive sensor in lieu of the transponder disclosed by

Evanyk and the external reference sensor incorporated into the receiver disclosed by Evanyk in order to decrease the size of the transponder device (without having to use a power supply) and provide the receiver with appropriately triggering alarms that exceed threshold values in order to ensure the safety of individuals wearing the tags. In addition, while Evanyk discloses a sensor, Evanyk does not disclose a chemical sensor. Jeutter, on the other hand, discloses a chemical sensor (col 9, lns 59-65). It would have been obvious to substitute the sensor disclosed by Evanyk for the chemical sensor disclosed by Jeutter, so that the sensor responds to chemical changes, thereby notifying appropriate parties of a chemical change in order to ensure the safety of a patient or monitored person whose body has experienced a chemical change.

For claim 92, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 1 as stated above regarding the radiation sensor disclosed by Quinn.

For claim 93, Evanyk does not disclose any chemical sensors, however, Jeutter discloses a single chemical sensor which is used to warn a bearer of said patch of an impending medical condition. While Jeutter only discloses a single chemical sensor, it would have been an obvious design choice to include multiple chemical sensors in order to monitor several locations of a body to determine a chemical change, thereby providing a comprehensive means of monitoring for chemical changes on a body.

29. Claim 91 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evanyk et al. (US 2004/0225199 A1), Quinn et al. (US 2005/0101843 A1) and Jeutter et al. (US

6,583,722 B2), and further in view of and further in view of Anderson (US 7,026,941 B1).

Evanyk discloses a skin patch sensor with a battery, but does the skin patch sensor is not a MEMS sensor. Anderson, on the other hand, discloses a MEMS sensor (col 3, lns 14-20). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to replace the sensor, disclosed by Evanyk, with the MEMS sensor, as disclosed by Anderson, in order to sense variables, such as temperature over a distance and operate on very little power thereby enhancing the efficiency of the transponder.

Response to Remarks

30. The Applicant did not present any arguments in the remarks filed on December 15, 2009 and no remarks were filed with the request for continued examination filed on February 15, 2010.

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

DeLuca et al. (US 6,238,338 B1) discloses an adhesive skin patch for monitoring biosignals and assigning ID codes to a skin patch.

Kwoen (US 6,903,658 B2) discloses a cell phone for monitoring parameters of a human and then sending status signals of parameters over a network.

Sakano (US 7,354,195 B2) and Felkowitz disclose a temperature sensor integrated with an adhesive flexible patch.

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Mehmood whose telephone number is (571) 272.2976. The examiner can normally be reached 8:00-4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Benjamin Lee can be reached at (571) 272.2963. The fax phone number for the organization where this application or proceeding is assigned is (571) 273.8300 for regular and after final communications.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272.2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jennifer Mehmood/
Primary Examiner
October 22, 2010